Author Index, Vol. XXIII, 1959

	Page
Bicknell, Alice	109
Bird, Luis	109
Bohman, V. R.	29
Brizzee, Kenneth R.	337
Butterworth, Bernard B.	75
Chew, Robert M.	75
Crawford, Chester R.	349
De Gennaro, Louis D.	235
Enomoto, Kingo	109, 137
Ensminger, M. E.	221
Flickinger, Reed A.	251
Ford, E. H. R.	191
Fujisawa, Michiaki	137
Gallagher, J. Roswell	1
Garn, Stanley M.	189
Greulich, William W.	189
Griffin, Ronald	21
Hafez, E. S. E.	221
Herrin, William F.	349
Hopper, Arthur F.	13
Horn, G.	191
Jacobs, L. A.	337
Jean, Pierre	169
Kelly, C. F.	97
King, R. C.	37
McConnell, Benjamin	137
Melendy, H.	29
Meredith, Howard V.	55
Miller, Theodore R.	109
Mohsen, Tahsin	303
Nakabayashi, Kozo	109
Niswonger, Jeanne	109
Prioreschi, Plinio	169
Quay, W. B.	313
Regan, Nancy	273
Renninger, George	109, 137
Robertson, J. H.	29
Royo, Paris E.	313
Russo, Robert P.	205
Sang, J. H.	37
Schadé, J. P.	159
Schjeide, Ole A.	273
Seltzer, Carl C.	1
Selye, Hans	169
Shamir, Zvi	189
Simons, Sue	273
Smith, A. H.	97
Sokoloff, Boris	109, 137
Spurgeon, John H.	55
Suzuki, Howard K.	291
Thommes, Robert C.	205
Torell, C.	29
Trauner, Walter	109, 137
Wade, M. A.	29
Winget, C. M.	97
Wunder, Charles C.	349
Young, Norma D.	55
Zbar, Flora	137

Subject Index

Accelerated forces,
physiological changes induced by . . . 107
Adenohypophysis in developing chick . . . 205
Adolescent boys,
anthropometric measurements of . . . 2
Aminopterin,
inhibition of nucleic acid synthesis . . . 41
Analysis of body disproportions . . . 6–10
Androgens,
effect on somatic growth and gonopodial development . . . 303
effect on total body length . . . 304
inhibitory action on somatic growth . . . 310
Anti-tumor activity of Mitomycin C . . . 112
Anti-tumor activity of several compounds . . . 130
Anti-viral factor,
administration of . . . 148
Anti-viral activity of Mitomycin C . . . 112
Axial gradient of incorporation of isotopes into proteins . . . 269
Axial polarity in regenerating flatworms . . . 251
Behavior of newborn kangaroo rat . . . 80
Bipolar flatworms . . . 263
Blood hemoglobin in beef cattle from different areas . . . 31
Body disproportions, ranges of . . . 5, 6
Body disproportions and personality rating in adolescent males . . . 1

Author Index, Vol. XXIII, 1959

	Page
Bicknell, Alice	109
Bird, Luis	109
Bohman, V. R.	29
Brizzee, Kenneth R.	337
Butterworth, Bernard B.	75
Chew, Robert M.	75
Crawford, Chester R.	349
De Gennaro, Louis D.	235
Enomoto, Kingo	109, 137
Ensminger, M. E.	221
Flickinger, Reed A.	251
Ford, E. H. R.	191
Fujisawa, Michiaki	137
Gallagher, J. Roswell	1
Garn, Stanley M.	189
Greulich, William W.	189
Griffin, Ronald	21
Hafez, E. S. E.	221
Herrin, William F.	349
Hopper, Arthur F.	13
Horn, G.	191
Jacobs, L. A.	337
Jean, Pierre	169
Kelly, C. F.	97
King, R. C.	37
McConnell, Benjamin	137
Melendy, H.	29
Meredith, Howard V.	55
Miller, Theodore R.	109
Mohsen, Tahsin	303
Nakabayashi, Kozo	109
Niswonger, Jeanne	109
Prioreschi, Plinio	169
Quay, W. B.	313
Regan, Nancy	273
Renninger, George	109, 137
Robertson, J. H.	29
Royo, Paris E.	313
Russo, Robert P.	205
Sang, J. H.	37
Schadé, J. P.	159
Schjeide, Ole A.	273
Seltzer, Carl C.	1
Selye, Hans	169
Shamir, Zvi	189
Simons, Sue	273
Smith, A. H.	97
Sokoloff, Boris	109, 137
Spurgeon, John H.	55
Suzuki, Howard K.	291
Thommes, Robert C.	205
Torell, C.	29
Trauner, Walter	109, 137
Wade, M. A.	29
Winget, C. M.	97
Wunder, Charles C.	349
Young, Norma D.	55
Zbar, Flora	137

Subject Index

Accelerated forces,
physiological changes induced by . . . 107
Adenohypophysis in developing chick . . . 205
Adolescent boys,
anthropometric measurements of . . . 2
Aminopterin,
inhibition of nucleic acid synthesis . . . 41
Analysis of body disproportions . . . 6–10
Androgens,
effect on somatic growth and gonopodial development . . . 303
effect on total body length . . . 304
inhibitory action on somatic growth . . . 310
Anti-tumor activity of Mitomycin C . . . 112
Anti-tumor activity of several compounds . . . 130
Anti-viral factor,
administration of . . . 148
Anti-viral activity of Mitomycin C . . . 112
Axial gradient of incorporation of isotopes into proteins . . . 269
Axial polarity in regenerating flatworms . . . 251
Behavior of newborn kangaroo rat . . . 80
Bipolar flatworms . . . 263
Blood hemoglobin in beef cattle from different areas . . . 31
Body disproportions, ranges of . . . 5, 6
Body disproportions and personality rating in adolescent males . . . 1

Page

Body form,
measures of 64–67
Body measurements,
procedures for 57
Body size,
statistics of 58–63
Body size and form of American born boys 55
Bone growth,
inhibition by estradiol valerate 301
Brain weight,
postnatal increase in 343
Cancerous tissue,
intra-ocular transplantation of 21
Cartilage,
effect of thyroxin and estradiol valerate on 301
Cattle, molydenum toxicity in 29
Cell packing densities,
method for determining 338
Centrifugal forces,
effect on growth and survival of domestic birds 97
Centrifugation,
effect on reproductive function 106
Cerebral cortex,
nerve cells of 160
of white rat, early postnatal changes 337
Chick embryo,
total net weight 285
Chick embryo cells, tissue culture of 237
Chick lymphomatosis virus 151
Chick serum,
ultracentrifugal patterns of 279–282
Chloramphenicol,
effect on polarity of regenerating flatworms 254, 261
Chorio-allantoic grafting 236
Colcemide production of bipolarity 263
Comparative growth data for white and kangaroo rat 85
Composition of experimental roughages 30
Connective tissue structures in transplanted retinas 321
Constant temperature chamber for centrifugation of fly larvae 351
Cortical depth increment,
measurement of 339
Cyprinodont development as affected by androgens 303
Cytoplasmic basophilia and Nissl body development 165
Cytoxicity of Mitomycin C 133
Deacetylmethylcolchicine,
effect on polarity 261
Decrease in relative growth constants as a function of temperature 354
Development of cerebral cortex,
critical period in 166
Developmental stages of *Dipodomys* embryo 78
Differential growth between cranial and facial portions of skull 194
Differential growth of bones of cranial base 194
Differential growth of cranial cavity 199, 200
Differential growth of rat skull 191
Differentiation of glycogen body during chick development 235
Dipodomys merriami 75
Dipodomys species,
comparative birth weights of 88
Drosophila melanogaster 38, 349, 357

Page

Dugesia tigrina 252
Effect of
antiviral factor on Rous sarcoma and chick lymphomatosis viruses . . 137
cortisone on tumor transplants in guinea pig eye 26
roughages on molybdenum toxicosis 29
on weight changes and blood composition 32, 33
Mitomycin C on rats and chicks after intermittent application . . . 115
on nucleic acid of tumor tissue 119
on viruses 121, 122
nutrition on fecundity and egg viability 39
Estradiol-treated mice 293
Estradiol valerate,
effect on mouse femur growth 291
Estrogen-induced protein synthesis during chick development 273
Femur lengths of 21-day mice 292
Fibroplasia as a result of water retention 185
Folic acid,
rôle in oogenesis 37
Glycine C-14,
effect on regenerating worms 259
Glycogen accumulation
during development 246
of embryo cells *in vitro* 246
Glycogen body,
growth in tissue culture 242
histology of 242
of chick embryo 235
Glycolysis in tumor tissues as affected by Mitomycin C 112
Gonopodial formation,
effect of androgens on 303, 307
potentiality of female anal fins 310
Gravitational effect on growth constant at different temperatures 355
Gravity and temperature,
combined influence on growth of fruit fly larvae 349
Gray/cell coefficient in early post-natal stages 342
Growth,
effect of Mitomycin C on 130
Growth of
birds during and after centrifugation 105
bone 301
chick embryos 236
chorio-allantoic transplants 243
cranial base 194
cranial cavity 199, 200
cribriform plate 201
embryonic cells in tissue culture 237, 238
fruit fly larvae,
influence of gravity and temperature on 349, 352
intra-ocular transplants 21
muscles as affected by food intake 221
regenerating flatworms 251
mouse femur,
effect of thyroxin and estradiol valerate on 291
nerve cells and cerebral cortex 341
neurocranium during post-natal development 203
rat skull 191, 194
strain specific tumors in anterior chamber of guinea pig eye . . . 23, 25
Growth and development of the kangaroo rat 75, 85
Growth and differentiation of retinal transplant 316

	Page
Growth and survival of birds under chronic acceleration	87
Growth constants as a function of temperature at different gravities	353
Guinea pig eye as a site for tumor transplant	22
Heterologous transplantation of cancerous tissue	21
Histogenesis and vasculogenesis in pituitary gland of chick embroys	203–216
Human anatomy and embryology, list of films	73
Hyaloid vascular tissue, reconstitution of	321
Inhibition of Rous virus by molasin	156
Isotopic tracing of specific protein activity	255–257
Kangaroo rat,	
behavior of	80
growth and development of	75
Larval growth constants at different temperatures and gravities	353
Lebistes reticulatus	13
effect of androgens on	303
Linear dimensions of *Dipodomys merriami* raised in captivity	89
Linear growth of *Dipodomys heermanni*	91
Lipoprotein, total	276
Liver weight during chick development	285
Loin muscle growth,	
correlation studies	229–230
Loin muscles in swine,	
development of	221
Loin square measure	224
Long-Evans rat,	
fetal retina of	314
Longissimus dorsi,	
measurement of	224
Lymphomatosis, chick	137
Mammalian retina,	
transplantation of	313
Mammalian thyroid powder,	
effect on oxygen consumption in fish	13
Measurements of kangaroo rat,	
analysis of	77
Methyl testosterone,	
effect on gonopodial development	306
Mitomycin C,	
anti-tumor effect of	109
anti-viral activity of	112
assays of toxicity	113
cytotoxicity of	110
effect on ascites tumor cells	123–129
effect on baby chicks	114
Mitomycin C content of tissues	111, 120
Molasin	137
Molybdenum toxicosis in beef cattle	29
Mortality of chicks under prolonged centrifugation	99–101
Muscles,	
measurement of	223
Nerve cell body volume and nuclear volume,	
measurement of	160
Nerve cells,	
differential growth of	159
Neuron packing density in cerebral cortex	160
Neuron volume changes, postnatal	340
Nissl bodies in nerve cells of cerebral cortex	160
Nuclear-cytoplasmic ratio in early postnatal neurons	341
Nuclear volume measurement	164

Page

Nutrition,
effect on loin growth and fat deposition 225
effect on muscle development 221
effect on total carcass weight 227
Oogenesis,
in adult *Drosophila melanogaster* 37
rôle of folic acid in 37
Ovaries of *Drosophila*,
influence of folic acid on 43–49
Oxygen consumption in thyroid-treated fish 13, 15
Personality traits as related to body disproportions 1
Pituitary gland of chick embryos 205
Planaria,
axial polarity during regeneration 251
Pneumodermas for growth of connective tissues 173
Polarity of regenerating worms,
effect of inhibitors of protein synthesis on 261–262
Postnatal development of nerve cells of the rabbit 160
Pregneninolone,
effect on gonopodial development 305
Protein fractions,
specific activity in various regions of regenerating worms 256
Protein level increase in cattle fed alfalfa and native hay 34, 35
Protein synthesis,
effect of X-irradiation on 273
Proteins, quantitative distribution of 255
Radioactivity of beta lipoproteins in labeled chick serum 288
Radioactivity of sera of isotopically labeled chicks 286–287
Rat skull,
differential growth of 191
Recovery of ovary from aminopterin treatment 50
Regeneration of *Planaria* 251
Retina, fetal 314
Retinal tissue,
staining of 315
Retinal transplants,
effect on host eye tissues 322
measurement of 317
survival of 335
Rod cells of retinal transplants 318
Rous sarcoma virus, ... 137–139
intravenous inoculation into chick embryos 140
Serum calcium 275
Serum lipids of control and treated chicks, ... 278–279
total 277
Serum proteins elicited by estrogen treatment 274
Serum non-lipid phosphorus 283
Serological experiments on regional distribution of specific proteins . . . 260
Skull dimensions,
differential growth analysis of 191–193
Skull growth,
statistics of 196–197
Staining of glycogen body 239
Synergistic effect of thyroxin and estradiol valerate on femur growth . . . 298
Tail length in kangaroo rat 93
Temperature-dependent sedimentation of larval material 356
Testosterone propionate,
effect on gonopodial development 307
Thyroid of teleost fish,
rôle of 17, 18

Page

Thyroxin,
effect on mouse femur growth 291
Thyroxin treated mice 293
Tissue scaffolding, artificial 172
Tissue growth, water fixation as a cause of 169
Tolerance of chicks to centrifugation 103
Total blood cell count of weanling beef cattle 31
Toxicity of anti-tumor drugs 131
Transdehydroandrosterone,
effect on gonopodial development 306
Tumor tissue,
estimation of DNA and PNA in 111
Vasculogenesis in chick embryo adenohypophysis 205
Volume and density relationships in post-natal neurons 346
Volume of nerve cell bodies during development of the cerebral cortex . 161, 162
Water fixation,
as a stimulus for connective tissue growth 183
in tissues 169
Weight growth of *Dipodomys* 82, 83
X-irradiation,
effect on protein synthesis in the chick 236